



# ENERGY SECTOR LEGAL AND REGULATORY ASSESSMENT: THE REPUBLIC OF TAJIKISTAN

## **USAID's Regional Energy Markets Assistance Program (REMAP) for Central Asia**

Implemented by:

**The United States Energy Association** 

#### Prepared by:

John W. Gulliver Catherine R. Connors Isabel M. Bjork Pierce Atwood LLP

#### **Prepared for:**

USAID's Regional Energy Markets Assistance Program (REMAP) for Central Asia

**Implemented by the United States Energy Association** 

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United States Energy Association 1300 Pennsylvania Avenue, NW Suite 550, Mailbox 142 Washington, DC 20004 +1 202 312-1230 (USA)

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#### I. INTRODUCTION

The following is a baseline assessment of the current legal and regulatory framework for the energy sector in the Republic of Tajikistan. This Assessment is prepared by Pierce Atwood LLP, under contract with USEA, supported by USAID. It is a part of Component Three of the Regional Energy Markets Assistance Program ("REMAP") to assist in the development of an electricity market in the Central Asian Republics ("CAR").

This Assessment has been developed to outline the current legal and regulatory situation in order to identify priorities and areas where further targeted support could provide the greatest benefit in developing the Tajik energy sector.

This document is the result of a visit to Dushanbe and meetings with local stakeholders, work with REMAP experts, and review of applicable legislation and background materials to identify appropriate next steps. In the event that a further decision is made by USAID to support the recommendations provided here, the next step would be to develop transparent, standard procedures and documentation to facilitate strategic investment and cross-border transactions, in a manner that builds institutional regulatory capabilities.

The starting point for such regularization could be the preparation of the following, with appropriate counterparts from the Government and utility:

- ➤ A transparent, user-friendly legal and regulatory framework for the development of small hydroelectric projects, intended to expedite development of these resources by private sector investors;
- > Standard power purchase agreements (PPAs) to cover cross-border and external sales and purchases of capacity and energy, entered into with a strengthened transmission system operator ("TSO") within the utility;
- Institutionalization of a body made up of members from the Ministry of Economic Development and Trade and Ministry of Energy and Industry, to act as a transparent, "one-stop shopping" avenue through which interested parties could investigate, pursue, obtain and protect investment and sector development; and
- A review and revision of the Foreign Investment Law (if deemed within the scope of this project) to comport with legitimate, international investor expectations in order to add clarity to investor rights and protections, and to facilitate enhanced international foreign and private sector investment.

The PPA effort noted above is envisioned as a starting point for the broader development of a coherent, transparent, commercially-based and formal legal and regulatory framework for cross-border trade and market development, in partnership with a capable TSO.

The joint Ministerial office recommended above would, in the near term, provide information and promote the standardized, versus *ad hoc*, treatment of investments and ongoing transactions in the sector. It could also function as the Governmental representative in the working group that develops the recommended small hydro and TSO market frameworks. Over time, this joint Ministerial office could pinpoint and prioritize other improvements in the legal and regulatory framework and practices thereunder.

The legal and regulatory framework in Tajikistan, as in many developing countries, is in flux, and practices do not always follow what the laws and regulations provide. In order to concentrate support in the areas of most need and where progress could provide the most benefit, we conclude that, in lieu of an attempt to amend this framework and these processes on a broad basis, efforts should focus on standardization and clarification in two areas: strategic investment and cross-border trade. Instead of the wholesale re-writing of existing laws and regulations, we recommend the creation of a joint Ministerial office to assist in helping the public and interested parties understand and navigate the existing framework, and in developing that framework in two specific areas: a process for small hydro development, and standard PPAs, with a strengthened TSO. If deemed within the scope of this project, attention also should focus on the general Foreign Investment Law in order to encourage strategic investment overall.

The text of the Assessment is in six parts:

- 1. Introduction
- 2. Executive Summary
- 3. Background
- 4. Principal Findings
- 5. Principal Recommendations (Roadmap)
- 6. Conclusion

#### Attached as Appendices are:

- 1. A list of relevant legislation
- 2. A list of principal organizations interviewed

#### II. EXECUTIVE SUMMARY

The Republic of Tajikistan is landlocked, with a great hydroelectric facility potential, but with few other primary energy resources except for untapped brown coal reserves. Its existing energy sector infrastructure is sparse and in need of rehabilitation. The Republic's greatest need in the energy sector is to facilitate strategic investment and cross-border trade.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> In his annual speech to the Parliament on April 30, 2007, President Emomali Rahmon emphasized Tajikistan's interest in building regional cooperative efforts, particularly in the energy sector. See <a href="http://www.caucaz.com/home\_eng/depeches.php?idp=1650">http://www.caucaz.com/home\_eng/depeches.php?idp=1650</a>.

One strategy commonly pursued to promote such goals is the establishment of an independent regulatory body to administer and enforce a coherent and transparent set of energy laws and regulations. In the long run, such an approach could benefit Tajikistan. Currently, a series of laws and regulations has been enacted, but some of them are unclear and incomplete; regulatory authority is not clearly delineated and currently resides within Ministries; and *ad hoc* practices have developed. Proposed support, therefore, should not be inconsistent, but rather should facilitate a potential long-term objective of an extensive refurbishment of existing legislation, incorporating an autonomous, accountable and authoritative regulatory agency.

Given existing circumstances in Tajikistan, however, an incremental approach may make the most sense and provide the greatest benefit in the shortest amount of time. In the short and middle term, Tajikistan needs to concentrate on acquiring strategic investment and regularizing its cross-border transactions. The journey towards a coherent, fully transparent, operational and independent regulatory system should begin with efforts toward standardizing cross-border transactions, strengthening the TSO, and targeting specific actions to facilitate investment.

Tajikistan faces many obstacles in growing its infrastructure, increasing its trade and improving the provision of services to its industrial, commercial and household consumers. Some of these obstacles involve regional political issues and/or economic needs and cannot be addressed solely through domestic reforms to the legal and regulatory structure. The issue presented and addressed here is to identify the practical and effective steps that can be taken, from a legal and regulatory perspective, which can best contribute to addressing these broader concerns.

This Report recommends three steps: development of small hydro projects, cross-border PPAs with a stronger TSO, and creation of a joint ministerial body. These are contemplated as mechanisms to target Tajikistan's immediate need in the energy sector, such as infrastructure development, in a manner that promotes transparency and standardization of transactions in the sector, and starts the journey towards a fully transparent and coherent legal and regulatory structure. It is also worth commenting here that attention to the Foreign Investment Law could improve the investment environment as a whole.

#### III. BACKGROUND

This Assessment was conducted in light of the generally accepted attributes of a sound energy sector's legal and regulatory framework; REMAP's overall goals; identified areas for reform in the CAR; desired results; the general factual predicate presented by the energy sector in the Republic of Tajikistan; and regional issues. Each of these elements is explained below.

#### A. REMAP

#### 1. Overall Goals

REMAP's overall goal is to assist the development of a CAR electricity market, taking into consideration the following objectives:

- Establish a market that is transparent and competitive;
- ➤ Increase electricity trade in Central Asia;
- ➤ Introduce market-based solutions for current and future regional disputes related to hydroelectricity facilities and reservoirs; and
- ➤ Build the capacity of CAR regulators to develop the electricity industry in the region, while protecting the interests of consumers.

This Assessment, therefore, examines the current legal and regulatory framework in the Republic of Tajikistan and makes recommendations in light of these objectives and overall goals. Because it is important to establish a viable regional market and increased cross-border trade, one goal is to develop a transparent and predictable regulatory environment to facilitate that trade.

#### 2. Components

REMAP has three key components:

- 1. Regional Electricity Market Development;
- 2. Market Development Policy Work with Selected Regional Energy Associations; and
- 3. Support for Electricity Sector Reforms in the Kyrgyz Republic and the Republic of Tajikistan.

This Assessment relates to the third component. It focuses on those aspects of the current legal and regulatory framework in the Tajik electricity sector that need reform in order to further the goals and objectives noted above.

Aside from general improvement of regulation, governance and transparency, USAID has identified the following as substantive areas needing reform:

- > Distribution services;
- Social safety net programs; and
- Market-based pricing and cost recovery.

The Assessment's findings and recommendations take into account these focus areas for reform.

#### 3. Desired Results

The key results identified for REMAP's first phase (the first two years) for the third component include:

- Auditing and making transparent Tajikistan's electricity exports;
- ➤ Harmonizing Tajikistan's tariffs with those of its neighbors and preparing a sound tariff methodology; and
- ➤ Addressing social safety net concerns.

These desired results, consistent with REMAP's goals and objectives, reflect a need for the Tajik legal and regulatory framework to:

- ➤ Gain in transparency;
- Formalize cross-border transactions, and enable the TSO function within the electricity utility to audit such transactions; and
- Facilitate strategic investment that will benefit the population, with a rational tariff methodology that covers costs while Governmental policies protect vulnerable populations.

#### 4. Areas of Assessment

The proposed REMAP workplan identifies among its deliverables a baseline assessment of current and proposed legal and regulatory framework for the Republic of Tajikistan. The workplan provides that the assessment should characterize the Tajik legal and regulatory framework to determine its capacity to support private investment and increased electricity trade by examining its treatment of:

- ➤ National Energy Security;
- > Private Investment;
- Openness and Transparency in Regulation;
- ➤ Regional Electricity Trade;
- > Energy Efficiency;
- Environmental Protection: and
- Protection of Vulnerable Populations.

The workplan envisions that REMAP will identify the areas in which the Republic of Tajikistan's national energy policy, laws and regulations are inconsistent or deficient with respect to the aforementioned criteria, and areas in which the Republic of Tajikistan's laws and regulations regarding cross border trade must be harmonized with those in Kazakhstan and the Kyrgyz Republic and, as the regional market framework develops, those of the remaining Central Asia Republics.

Given the status of the legal and regulatory framework in the Republic of Tajikistan, and, more particularly, the actual practices under that framework, progress must advance in multiple stages. This document provides an initial evaluation of how to move forward in a manner consistent with the development of a sound sector and the enabling of regional trade that will most immediately address some of Tajikistan's existing concerns. The first step is to identify those concerns and propose the process by which targeted reform efforts in the legal and regulatory arena can help.

#### 5. Summary

This Assessment reviews the existing Tajik legal and regulatory framework in light of REMAP's overall goal – to facilitate the development of a regional electricity market – and the component objectives identified as a necessary part of achieving this goal, including improvement in transparency and protection of vulnerable populations.

The Republic of Tajikistan has no independent regulator, and its legal and regulatory structure is imperfect, and in particular suffers from a disconnect between legislation and practice. Hence, broad legal and regulatory reform should be a long-term goal. More immediately, however, actions can be taken to move the legal and regulatory structure towards transparency and regularization and away from ad hoc decision-making, in areas most in need of progress, such as cross-border trade, development of small hydro facilities, and generally creating an environment that encourages and protects private, strategic investment.

#### B. Investigation

The process through which the information was collected and this Assessment was prepared is as follows:

- ➤ Ms. Jamila Amodeo of Moseley Horizon, Inc. provided to the authors a draft report of her interviews and findings in-country during the week of January 16-22, 2007;
- ➤ Mr. John Gulliver traveled to the Republic of Tajikistan April 2 through 5, 2007, and met with stakeholders; and

➤ The authors reviewed the laws and regulations obtained from USEA and during the trips noted above, as well as various other background materials.

#### C. Sector Overview

#### 1. The Tajik Electricity Sector

#### a. General Background

Tajikistan is mountainous and landlocked. It borders Afghanistan to the south, Uzbekistan to the west, Kyrgyzstan to the north and China to the east.

After gaining independence in 1991 following the break-up of the Soviet Union, the Republic suffered a civil war from 1992 – 1997 with, among other things, severe economic consequences and physical damage to or destruction of energy infrastructure. With a population of 6.5 million, its gross domestic product is \$2.3 billion, one of the lowest per capita GDPs among the 15 former Soviet republics. Over two-thirds of the population continues to live on less than \$2.15 a day. The unemployment rate remains high, and the Tajik economy relies heavily on remittances from Tajik workers living in Russia, Ukraine, and Kazakhstan.

Since 1997, however, Tajikistan has experienced steady annual economic growth in the environs of 7 - 8% (7% in 2006), fueled by construction activity and remittance-financed demand in retail services. Population growth is estimated to be in excess of 2.19% for 2006.

#### **b.** General Investment Climate

Tajikistan has a 1200 kilometer border with Afghanistan. Cotton is the Republic's most important crop, but the industry is highly indebted and has failed to earn expected revenues. These background conditions have (i) made corruption issues a challenge<sup>2</sup> and (ii) encouraged the Government of Tajikistan ("GOT") to promote and develop its energy resources.

The GOT has strongly encouraged investment and taken steps to improve its investment climate and progress is being made. The burden of foreign debt has been reduced. According to the International Monetary Fund, fiscal policy is prudent.<sup>3</sup> Tax reform is underway.

Much work, however, remains to be done. The current Foreign Investment Law needs changes to simplify procedures, and, in general, facilitate and protect investment. The Law is perceived by private foreign investors as needing more detail and greater elaborations of investor rights and protection of legitimate investor interests. The Law has been cited as a primary reason why certain investments by qualified, private foreign investors were not made. It was enacted in 1992 and amended in 1996 but needs further changes.

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<sup>&</sup>lt;sup>2</sup> Tajikistan is rated 142 out of 163 in Transparency International's corruption perception index for 2006.

<sup>&</sup>lt;sup>3</sup> See http://www.imf.org/external/np/sec/pn/2007/pn0744.htm/

Development is also hindered by a poor infrastructure (power, communication and transportation), and productivity is low. The ratio of investment to capital is poor. The cost of financing is high, and access to financing difficult. The labor market is not skilled, and many leave the country for better remuneration elsewhere. CPI inflation was also relatively high in 2006, reaching 12.7%.

#### c. Energy Resources and Infrastructure

Development of the energy sector is a priority in the Republic. The country has substantial untapped energy resources, particularly hydro. The Republic is also estimated to have 4.6 million tons in brown coal resources. The total generation capacity of Tajikistan is estimated at 527 billion kWh, only 6.5% of which is currently being exploited.

Existing infrastructure is minimal, old and in poor condition, due to lack of investment and war damage. Currently, hydro energy comprises more than 90% of the energy of Tajikistan. The annual electric power deficit on average is estimated at 3.5-4 billion kWh, but the deficit is highly seasonal. Tajikistan annually generates 16 billion kWh, but is unable to meet its winter peak demands for energy. Ms. Amodeo was told that the winter deficit is 2.5 billion kWh. In the summer, Tajikistan is a substantial exporter. Mr. Gulliver was told that there is up to 3 billion kWh of excess power in the summer, with a 4 billion kWh deficit in winter. In 2002, according to World Bank Central Asia Regional Electricity Export Potential Study of December 2004, the energy consumption of power in Tajikistan equaled 57% of demand, whereas in winter it equaled only 43%.

A series of initiatives to bring in private investment and build new major plants is in various stages of development:

#### Generation

- ➤ Pamir The power Assets of the Gorno-Badakhshan region are currently governed by a 25-year concession to the privately owned Pamir Energy Company, which functions as a vertically integrated utility, unconnected to the remainder of the system. This is the first private sector project in the energy sector with lender financing.
- ➤ Sangtuda-1 Sangtuda-1 is a separate joint stock company owned by RAO UES of Russia and the GOT that was formed in order to attract equity from outside sources. The agreement to build Sangtuda-1 was signed on October 16, 2004, together with a Long-Term Cooperation Agreement between the GOT and the Russian Aluminum Company. According to these Agreements, the Government of Russia will invest in the Sangtuda-1 Project by purchasing stock of the Joint Stock Company "Sangtuda" in the amount of \$250 million. Contribution by the Russian Aluminum Company to the authorized fund of "Rogun" is estimated at \$650 million. The current total cost estimates are about \$482.7 million. Sangtuda-1 will have an installed capacity of about 670 MW.

- ➤ Rogun HPP Construction of the largest hydropower plant in Central Asia, Rogun, started in 1976. The estimated capacity of Rogun HPP will be 3,600 MW, including six units of 600 MW each and 13.1 billion kWh of annual generation capacity. Priority is implementation of Phase I, comprising the installation of two 600 kW units. The total project cost for Phase I, including equipment for such two units, is estimated at about \$590 million.
- ➤ Sangtuda-2 On June 11, 2005, the GOT and Government of Iran signed a Memorandum of Understanding to build a Sangtuda-2 HPP. Iran has provided Tajikistan a concessionary loan of \$180 million in conjunction with the project. It will be the lowest hydropower plant in the Sangtuda Hydro System, expected to operate in parallel with Sangtuda-1 downstream from the Nurek HPP basin and will control daily water flow and cover overloads during winter period. Project capacity is expected to be 220MW.
- ➤ Other Hydros According to the Government's medium-term Power Development Program, the Vakhsh River Cascade will be completed after construction of Sangtuda-2 and Shurabskaya hydropower plants.
- ➤ Other Development Investors from Russia and China are currently holding discussions on potential investment in the coal mining sector.

If development plans are followed, by 2010, Rogun – Phase I, Sangtuda-1 and Sangtuda-2 will be fully commissioned, and existing plants will be modernized, resulting in approximately 326.4 billion kWh of potential generation, with 5-6 billion kWh of potential for export.

#### Transmission

In order to supply power from the Rogun and Sangtuda-1 HPPs, as well as to export electric power surplus in summer, the following projects are under various stages of discussion:

- ➤ 500 kV Transmission Line "South North" (Rogun Northern Tajikistan) This line will stretch 350 km from the Rogun HPP to Khudjant, along the Dushanbe-Khudjant Road. The Project cost is estimated at \$146 million. The transmission line will transfer power generated from Sangtuda and Rogun to power deficit regions of North Tajikistan. Options are also being considered for construction of 500 kV "Khudjant Shymkent (Kazakhstan)" and 500kV "Khudjant Datka (Kyrgyz Republic)" connecting to South Kazakhstan and Ural (Russian Federation).
- ➤ 500kV Transmission Line "Rogun Sangtuda Puli Khumri Kabul" A superconducting 500 kV OHL will run about 585 km from the Rogun HPP. The Project cost is estimated at \$159.3 million. The line will transfer power generated from Sangtuda and Rogun.

- ➤ Pyandj River On April 27, 2005 an Energy Cooperation Agreement was signed between the GOT and Afghanistan providing for the joint development of Pyandj River resources and the construction of transnational transmission lines.
- ➤ 750kV Transmission Line "Rogun Khorog Vakhan Corridor (Afghanistan) Peshawar (Pakistan)." This superconducting 750 kV transmission line, with wire sections of 3x500mm,² will extend 650 km to the Afghan border. The Project cost is estimated at \$274.3 million. The line will transfer about 700-800 thousand kWh. The line is envisioned in a Memorandum of Understanding on hydropower cooperation dated March 30, 2005 between the Ministry of Energy of Tajikistan and the Ministry of Water Resources and Energy of I.R. Pakistan.
- ➤ 500kV Transmission Line "Rogun Sangtuda Kunduz Herat (Afghanistan) Mashkhad (Iran)" Total length of the transmission line would be 1100 km, including 226 km through the territory of Tajikistan, with a cost of \$63.5 million from Rogun to the Afghan border and \$245.6 million from the Tajik border to Mashkhad, Iran.
- ➤ Other HVTL possibilities The following additional high voltage transmission lines are are being considered:
  - 500 kV OHL "Rogun Sangtuda Kunduz Puli Khumri Kabul Heart Mashkhad";
  - 500 kV OHL "Rogun Jirgital Kyrgyz Republic China";
  - 500 kV OHL "Rogun Kunduz Puli Khumri Kabul Jalalabad Peshawar";
  - 500 kV OHL "Rogun Dashtidjum Khorog Vakhan Corridor (Afghanistan) India."

In sum, many ambitious plans are being made for construction of generation and the transmission lines to transport the power, with some projects already underway. Together with the Kyrgyz Republic, the Republic of Tajikistan has developed an Energy Strategy through 2015. The Tajik strategy is a part of the National Economic Development Strategy, developed in 2004. Under that Strategy, the GOT plans to use its coal reserves to reach the level of mining production of 445,000 tons by 2010 and 815,000 tons by 2015.

In addition to these plans for large-scale projects, the National Economic Development strategy incorporates the development of new mini power stations and larger hydros. These projects, many of which are not grid connected, will not only reach new consumers but could also mitigate blackouts. Historically, hydroelectric development has consisted of massive projects, generally running several hundred megawatts of installed capacity or more. Many of these projects date from large industrialization projects carried out in the former Soviet Union. Many of the generation projects currently under construction or planned are also of this magnitude. Sangtuda – 1, for example, as noted, will have an installed capacity of 670 MW; Rogun of 3,600 MW and Sangtuda-2 of 220 MW. Small-scale hydro development (*e.g.*, less than 50 MW, or smaller) has largely been ignored to date. A special program to facilitate rapid

development of small hydros has many advantages for Tajikistan. Despite the abundance, if not over reliance, on hydroelectrically generated power, hydro nonetheless remains an indigenous, available, cheap, and carbonless resource. The REMAP team has been advised that small hydros could be an effective tool for bringing power to non-grid connected areas currently without power. In addition, because small hydros will be run off rivers and operate with low water capacity, it is likely that they could generate even during dry periods, thus partially offsetting the seasonal deficits that the current, large-scale hydro-dominant system faces. Moreover, a program that is investor friendly, fair, balanced, transparent and expeditious could not only jump-start small hydro development but also serve as a model for private investment in the power sector and in the Tajik economy generally.

#### d. Regional Market Issues

From a resource perspective, this region of the CAR has great potential for a robust market. If the GOT can proceed with its development plans as noted above, by 2015 power generation capacity could reach 34 billion kW, with export potential of 10-12 billion kW. The GOT indicated that it has been assured by the Governments of Afghanistan, Iran, and Pakistan of their great interest in importing Tajikistan's hydro generated power. Given rational electricity pricing in these countries, this presents a potential for developing attractive export markets. The seasonal nature of Tajikistan's hydro resources also supports the logic of a robust regional market that would benefit all participants.

Relations with neighboring countries, however, currently make cross-border trade a challenge. The United Dispatch Center (UDC)<sup>4</sup> is located in Tashkent, Uzbekistan and provides balancing services and coordinates frequency regulation for the entire Central Asia united power system (the Kyrgyz Republic, Tajikistan, Uzbekistan and Southern Kazakhstan). In past summers, electricity export to Kazakh and Russian markets has been limited by Uzbekistan's and sometimes Kazakhstan's refusal of transmission on the 500 KW lines that pass through their territory. Tajikistan and Uzbekistan currently have a dispute over transmission ownership, with Uzbekistan claiming ownership of several hundred kilometers of transmission lines in Tajikistan. Tajikistan has had other power disputes with trading partners in the past.

Currently, trade is carried out largely through non-transparent energy swaps. Barki Tojik, the state-owned utility (*see infra*), engages in energy swap agreements with the Kyrgyz Republic, Uzbekistan and Afghanistan. Mr. Gulliver was informed that Tajikistan provides about 1.5 billion kWh to Uzbekistan in the summer and takes back about 1.0 billion kWh in winter, and exports 1.5 billion kWh to the Kyrgyz Republic in the summer and receives power in the winter. From 1990 to 2000, exports declined from 2.7 TWh to 0.4 TWh, and imports declined from 3.9 TWh to 1.7 TWh.

Tajikistan and Kyrgyzstan have historically provided for frequency control for the entire Central Asia united power system.

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<sup>&</sup>lt;sup>4</sup> The UDC is sometimes called the Regional Coordinating Dispatch Center (CDC)

To the extent any of these cross-border transactions are memorialized in contracts is unknown, as no one on the REMAP team has had access to them. The REMAP team was also advised that these agreements are very basic, framework types of contracts, without the detail, clarity or risk-identification and allocation that one would expect in a modern, commercially driven PPA.

Discussions in-country with Mr. Gulliver in April 2007, however, confirm that the *ad hoc*, top-down process (in which the GOT reviews each contract and investment proposal separately, then organizes a committee to review the transaction or project involving a back-and-forth dialogue until consummation with the GOT) continues in a non-transparent and individualized manner.

#### e. Barki Tojik

Pursuant to a Memorandum of Understanding between the GOT and the World Bank, Barki Tojik was removed from being a department within the Ministry of Energy and made a joint stock company. Barki Tojik is now a 100% state owned, vertically integrated energy company with 10,000 employees. The Chairman of Barki Tojik is responsible for all state owned assets in the power sector.

Pursuant to the GOT-World Bank Memorandum of Understanding, unbundling of generation, transmission and distribution is planned. Barki Tojik, however, has preferred unbundling into three vertically integrated network companies: North, Central and South.

#### f. Tariffs

Some progress has been made to increase prices to move toward costs. The GOT agreed with the World Bank on a Tariff policy that would lead to a 2 cent tariff by the year 2010, with incremental annual increases of 40% once or twice a year. Electricity tariffs were increased accordingly to rise starting January 1, 2007 by 40 % (0.85 cent/kWh). The GOT, however, has now limited that price hike to 0.58 cent/kWh.

These increases and price levels are below the regional average; *e.g.*, in Uzbekistan, tariffs are to rise 3.1 cents/kWh and in Kazakhstan, 2.5 cents/kWh.

#### 2. The Legal and Regulatory Framework

#### a. International Agreements

The Republic of Tajikistan signed the Energy Charter Treaty in 1997. It is also a member of the following international and regional organizations:

- > Central Asian Regional Economic Cooperation;
- Eurasian Economic Community;
- ➤ Central Asian Energy Council;

- > Shanghai Cooperation Organization;
- ➤ World Trade Organization (observer);
- ➤ World Bank;
- ➤ International Bank for Reconstruction and Development;
- ➤ Multilateral Investment Guarantee Agency; and
- ➤ International Development Association.

#### b. Domestic Laws and Regulations

In terms of the future, Ms. Amodeo was told that a committee in Parliament is drafting a new electricity law. No such report, however, was made to Mr. Gulliver. He was told that amendments to the existing energy law (developed in 2000 and amended in 2005) are under consideration. This may only reflect a difference in semantics, not substance. In any event, The REMAP team was not provided with copies of the proposed amendments, and the scope of such amendments is unclear.

Focusing on the existing situation, there currently is no independent energy regulator. In the past, there was an attempt to create a regulatory agency, but this did not endure. Thereafter, the Antimonopoly Agency was then regarded as carrying out the regulator function in the sector. Pursuant to the GOT-World Bank Memorandum of Understanding noted *supra*, that Agency no longer exists as an independent agency, having recently been merged into the Ministry of Economic Development and Trade (hereinafter "MOEcon"). There is a newly established Ministry of Energy and Industry (hereinafter "MOEn"), which resulted from a merger of the Ministry of Energy with the Ministry of Industry.

In practice, all decisions are made by the GOT in the informal manner noted above.

The existing laws include the following.

#### i. Energy Laws

The primary energy law, the Law on Power Engineering, was enacted in 2000 (#33<sup>5</sup>) and amended in 2005 (#118). It defines key terms and indicates the fundamental state policy objectives in the sector, including security and reliability of supply, environmental protections, and efficiency and investment gains through moving to a market-based system. *See* Articles 2, 4.<sup>6</sup> The Law on Power Engineering authorizes the GOT to develop Tajikistan's energy policy (Article 6); pursuant to Article 7, the Ministry for Power Engineering is responsible for the implementation of that policy, including licensing. The division of authority is not entirely clear, however: GOT responsibilities include many "implementation" tasks, such as implementation of common prices

<sup>&</sup>lt;sup>5</sup> The Law on Power Engineering, as amended, referred to here as 2000 #33, is also called 2000 #123.

<sup>&</sup>lt;sup>6</sup> This analysis is based upon the best available translations of the referenced laws; we strongly recommend consulting local counsel for interpretations of the laws as enacted.

and tariffs, implementation of safety and service standards, and coordination of international activities. Article 6. The authority of the Ministry for Power Engineering, on the other hand, includes some policy-related responsibilities, like analyzing energy supply and demand and assessing investment needs and potential investors. Article 7.

As noted above, the Ministry for Power Engineering has merged into the MOEn; that merger may create further complexity under the current laws. For example, it is not entirely clear where oversight authority rests. The Law on Power Engineering indicates two bodies have some type of oversight authority: under Article 7, the Ministry for Power Engineering is charged with monitoring the activities carried out by power enterprises; a State Energy Inspectorate is established under Article 19 for oversight and enforcement of regulatory and legal standards. An earlier regulation, Regulation on State Power Supervision (1996 #465), granted a state supervision agency power to oversee the use, production, quality, security, efficiency, and conservation of electricity and heat supply. Article 1. However, this Regulation also noted that regional and local power supervision bodies would be concurrently authorized to supervise in this manner. Article 3.2.

While the Regulations of the Ministry for Power Engineering and Industries (2006 #605) do not expressly say so, this more recent regulation indicates that the newly-formed MOEn will have comprehensive authority to regulate the power industry. Section II.5 of those Regulations provides a lengthy list of MOEn responsibilities, including: development of Tajik energy sector policy and legislation; licensing and enforcing license terms; concessions of Tajik assets; promoting foreign investment; managing all power sector data; determining methods for tariff calculations; determining efficiency and conservation standards; and enforcement of legal standards and regulations in the power sector. MOEn does not have exclusive responsibility for these areas, however, but works in conjunction with other national and local governmental bodies. Section I.4. How these efforts are divided or coordinated is not clear.

More particularly, under the current laws and regulations, it is not entirely clear where the tariff-setting authority resides. The Law on Power Engineering also provides that energy prices and tariffs are set by agreement or contract unless provided otherwise by Tajik laws. *See* 2000 #33 Article 15. The Regulations on Power Engineering charge the MOEn with determining the methods of calculation of tariffs. *See* 2006 #605 Section 5. The Antimonopoly Body also has the authority to "coordinate" certain tariffs, which may include energy tariffs. Law on Competition, 2006 #198 Article 13. In practice, however, tariffs are typically established through a governmental decree. For example, see Decree #37 on the Tariffs for Electrical and Thermal Energy (Jan. 30, 2007).

Finally, the laws do not make entirely clear how the regulators will achieve transparency or whether their decisions will be appealable. Under the Law of Power Engineering, licensing is to be based on principles of competition and transparency, but the Law does not clarify how such transparency is to be achieved. 2000 #33 Articles 5, 6. The MOEn is charged with setting up printed mass media for the purpose of publishing the body's "normative legal documents," but it is unclear whether such publication is actually required. 2006 #605 Section 6. And while the state Antimonopoly Body can challenge monopolistic conduct in Court, it is not clear whether interested parties have the ability to bring suit challenging regulatory actions by the

Antimonopoly Body or any other state regulatory entity. *See* Law on Competition and Limitation of Monopolistic Activity in the Commodity Markets, 2006 #198 Article 11. The Antimonopoly Body also has the power to publish its decisions and orders when they affect the interests of "an indefinite circle of persons", but publication does not appear to be required. Article 13. While the Law on Natural Monopolies establishes a right of access to information by the state body, it is not clear what access the public has to that information. 2006 #198 Article 8. At a minimum, "commercial secrets" are not subject to disclosure under Article 8.

#### ii. Antimonopoly Laws

The Law on Competition (2006 #198) regulates the relations and transactions that influence the commodity markets in Tajikistan. It is not clear that energy falls within the definition of "commodity" under the statute, which is "an object of the civil rights (including works, services) intended for sale, exchange or other type of introduction thereof in the civil circulation." Article 3. Energy is not expressly included as a "commodity" in the Law on Competition, and the Law on Power Engineering uses neither "commodity" nor "services," in its definition sections. 2000 #33 Article 2.

The Law on Competition delegates the implementation of state antimonopoly policy to the state Antimonopoly Body. 2006 #198 Article 15. Assuming the Law on Competition does apply to the energy sector, we note that it is not entirely clear how the antimonopoly authority is divided among this state body, the MOEn and other state bodies in the energy sector. The Law on Natural Monopolies (1997 #525 as amended by 2001 #05) provides that the Agency for Antimonopoly Policy will be authorized to regulate "natural monopolies" through price regulations, tariffs, and service and quality requirements. Article 5; see also Regulations 2001 #75. Under the Law on Natural Monopolies, this Agency also appears to have some enforcement authority, including the authority to impose fines. 1997 #525 Article 7. Grounds for fines include overpricing, failure to comply with a regulatory requirement and failure to submit required information to the state body. Article 12. Pursuant to the Law on Competition, the state Antimonopoly Body is also granted a broad range of powers to enforce antimonopoly laws, including the power to annul or modify contracts and order specific conduct (or the cessation of specific conduct); also, Antimonopoly Body approval is required for certain acquisitions of stocks or assets. 2006 #198 Article 16. Third, the Regulations on Power Engineering address antimonopoly authority: under the Regulations, MOEn has the authority to "take preventive measures" to implement antimonopoly policies in the energy sector. 2006 #605 Article 5.

#### c. Market Transactions

Export and import are not regulated and any individual or commercial company is eligible to obtain licenses. As noted above, in practice, the process is *ad hoc* with the GOT a party.

#### d. Tariffs

Tariffs are set by the GOT by directive. The process is unclear. Prior to the recent merger of Ministries, it appears that, in order to increase a tariff, Barki Tojik presented calculations to the GOT; the GOT instructed the various ministries (Ministry of Finance, Ministry of Economy, Ministry of Energy, Ministry of Justice, Ministry of Agriculture, etc.) to review; the GOT then considered the Ministries' comments and issued a decree with its decision. Now it appears that tariff proposals are sent by Barki Tojik to MOEn for initial review, other Ministries are consulted, the proposed change is also tested against the World Bank MOU on tariffs, and the ultimate decision is still made by the GOT.

#### IV. PRINCIPAL FINDINGS

### A. The Existing Legal and Regulatory Structure is Opaque and Actual Practices Are Ad Hoc

There is no question that the existing legal and regulatory structure, both as a matter of formality and in practice, is not clear, and could benefit from a generic reform. Lack of clarity is a serious impediment to investment and can hinder regional harmonization.

Currently, investment is addressed on an *ad hoc* basis. Investors arrive with a set of proposals, which the GOT reviews on a case-by-case basis, each time forming a new interagency review committee. These committees negotiate and determine a set of terms, which eventually make their way, in a non-transparent manner, to the top echelons of the GOT, where a final decision is made. When Barki Tojik seeks to engage in a joint venture as above, it prepares a Memorandum of Understanding with the potential investor/partner, but final authorization must come from the GOT. The GOT requests input from all Ministries, and usually names a lead Ministry on behalf of the GOT; for example, if the project involves loans, then Ministry of Finance may be the lead. Because state-owned assets are involved, and because the regulator is the GOT, GOT approval must be obtained.

While in theory such a process might be efficient in individual instances on a macro level (if the top GOT officials support a project, logically the process would seek to eliminate bureaucratic obstacles), such opaque procedures not only provide an opportunity for corruption and discourage strategic investors who seek a transparent and level playing field, but also make it difficult to evaluate the merits of any proposed investment in a comparative or broader context. It creates unnecessary risk and transaction costs for the investor and complicates the GOT's ability to address service quality concerns.

Existing energy laws and regulations are not clear or complete, and further lack of clarity occurs due to a disconnect between ad hoc practices and adherence to the laws.

#### B. The Existing Investment Environment is Challenging

As noted above, many obstacles to facilitating investment exist. The Pamir Energy project provides an illustrative case study.

Pamir 1 was initiated by the World Bank and IFC. While originally intended to be a PPA under a public-private partnership arrangement, the project evolved into a vertically integrated project with a concession agreement, whereby Pamir Energy is responsible for generation, transmission, distribution and supply in a remote, non-grid connected region of Tajikistan. Aga Khan Fund for Economic Development ("AKFED"), the for-profit arm of the Aga Khan Foundation, took a 70% equity interest and the IFC, 30%. The IFC issued a loan at 0.75%, and lent to Pamir 1 at 6.50%, with the difference used to support the tariff. The tariff is to rise each year on the theory that economic growth will occur due to the associated plant, which in turn will support higher tariffs. The Swiss government issued a US\$5,000,000 grant to help subsidize the first 250 kWh of household consumption. Subsidies for tariffs are scheduled to be reduced over time and then end.

The project was partially built by the Soviets who had increased the power from 7 to 14 MW and started to develop the related Corruge hydro site at 5 MW. Pamir Energy took this partially developed project and increased the installed capacity to 14 MWh along with making related investments. After a catastrophic flood in February 2007, the project is now working its way back into production. There are currently five small HPPs in very poor condition in the region. Under the concession agreement, Pamir Energy has responsibility for rehabilitation of these sites, but not enough revenue is being generated to sustain this commitment.

Consumer relations with Pamir Energy's 30,000 customers are difficult. For instance, some consumers sued to try to obtain power at no cost. There are also metering disputes. The metering methodology had to be changed (it is now measured by square footage in some districts) and is still in dispute. Another methodology that Pamir Energy has adopted to avoid meter theft and meter dispute is to hardwire the meters outside of houses so that they cannot be tampered with. There is a very large nonpayment problem; while ultimately the collection rate is 90%, this is due to heavy government support. Theft is also rampant, along with technical losses (40%) because, *inter alia*, the system is overloaded. Because subsidies decrease over time, these collection and tariff issues are increasing.

The problem is compounded by the difficulty in cutting off customers. Over 700 theft cases are pending, with only 28 having been tried (all ruled in favor of Pamir Energy). Construction of the project was difficult – bank accounts have been blocked by a cement supplier; bribery and extortion issues exist; and builders have sued.

A preliminary agreement has been entered into where Pamir Energy would agree to export small amounts of electricity to villages across the border in Afghanistan. This agreement has been signed by the respective Ministries in Tajikistan and Afghanistan. Notwithstanding this encouraging sign, any substantial export will require a more stable network, which is currently in poor condition.

In short, the experience in Pamir underscores the difficult business climate and obstacles faced by new investors in the sector. These problems are not insurmountable, but they indicate that greater effort to promote and protect investments, on a systematic basis, from inception through implementation, is essential. Government Ministries and policies have both kept the project going and helped frustrate legitimate, normal investor expectations. On the one hand, Government and Ministry support has helped create stability, and the judicial system, though slow, has resulted in a string of court victories in favor of Pamir Energy with respect to cutting off customers for non-payment. On the other hand, the Government apparently has shown little interest, or ability, in eliminating egregious examples of extortion, bribery, and interference with normal development and operation of the company. If presented in an unvarnished case study, the current status of Pamir Energy would certainly discourage even the most intrepid of foreign, private investors. The patience and long term view of AKFED, and the unique public and private nature of the financing, have helped keep the project sustained where other, purely private investors may have given up and left the region.

More broadly, since the incorporation of the Antimonopoly Agency into MOEcon, the response to investor needs has slowed. Under current law, whenever a foreigner or Tajik acquires 20% of company in Tajikistan in excess of \$1 million (combined equity), prior approval is required and should be provided within 30 days (if the amount of equity is less, notification may occur after the fact). The required approvals are now not occurring in a timely fashion.

Existing conditions in Tajikistan require a diligent facilitation of investment, not only through realistic terms and expectations at the inception of a project, but to protect the investment thereafter, through, for example, rational cut-off regulations and enforcement.

#### C. <u>Tariff Methodologies Need Development</u>

While there is a general understanding that tariffs must rise to cover costs (with some mechanism to address social safety net concerns), the current legal and regulatory structure lacks a transparent methodology for calculating prices. Arbitrary and political decision-making in this area should be replaced with clear methodologies for calculating separate cost of service numbers for generation, transmission, and distribution and otherwise meeting international best practices.

Tariffs should conform to an established methodology, calculated through a rational and transparent process.

#### V. PRINCIPAL RECOMMENDATIONS (ROADMAP)

The REMAP workplan notes that the result from this Assessment should be a Legal and Regulatory Reform Roadmap containing a detailed set of recommendations for regulatory reform deriving from a consultative process with counterpart agencies. In this first stage Assessment, the goal is to list potential recommendations, which can then be reviewed, discussed, prioritized and fleshed out in the referenced consultative process.

Four principal recommendations are noted below. Each is designed to achieve the overall goal of creating a more coherent, transparent and systematic legal and regulatory framework, in which practices adhere to the rules as written.

#### A. Small Hydro Development

We recommend support in the development of small HPPs for multiple reasons.

First, it is a mechanism to help the consumer and improve quality of life. The goal would be to expedite the approval process and encourage private investment.

Second, it is a way to promote investment in an incremental fashion, in which lessons can be learned, then applied, and success can breed success.

Third, the process by which these small plants are developed can provide a template for larger improvements to the general legal and regulatory framework, both substantively and as a matter of process. Changes in the laws and regulations in this one area can be adopted to provide an example of clear and coherent legislation, with regulatory oversight provided to the joint ministerial body (*see infra*), moving that body toward institutionalization.

#### B. PPAs – TSO – Market Framework Development

Another area that should be the subject of targeted support is market development, to facilitate cross-border transactions. Just as the small hydro HPP assistance can provide a template for establishing a sound and transparent framework for encouraging and supporting investment, assistance in this area can help regularize and make transparent cross-border trade.

The beginning steps of this market development process would be the strengthening of the TSO component of Barki Tojik, preparation of model PPAs, and standardization of trade discussions. The goals would be institution building for the TSO; development of coherent and clear agreement templates to systemize deal making, and development of mechanisms to audit imports and exports. This would be achieved, as with the small hydro development, in a manner that brings clarity and transparency to an important component of the overall legal and regulatory framework, and advances the institution building of a regulatory oversight body.

Currently, it is unclear who, if anyone, is regulating the import and export of electricity, a situation which must be changed as a matter of legal governance. Political and other management issues also make monitoring flows and coordination with the dispatch center in

Tashkent difficult from a technical perspective. While clarifying the legal and regulatory framework, including the TSO's role, cannot solve all these problems, it can at least contribute to solving the problems.

Work on making transparent and systemic cross-border transactions should be coordinated with any effort to create a transparent tariff system, so that the pricing for cross-border trade becomes a part of an overall clear and coherent pricing mechanism.

#### C. <u>Joint Ministerial Body</u>

The goal of this area of support would not be to create yet another administrative entity, adding more confusion and layers of approval needed, but the opposite. The Joint Ministerial Body, consisting of representatives from the existing Ministries, would act as a conduit for facilitating investment, organizing and streamlining practices under the current laws and regulation, and bringing standardization to currently *ad hoc* procedures.

First, this body would be a standing organization, so that committees are not formed and re-formed with every proposed investment or project. This would help build regulatory capability, reduce arbitrariness, increase transparency and reduce opportunity for corruption.

Second, the body could identify and promote changes to the existing legal and regulatory framework most needed to achieve national strategy goals. It could also promote the interpretation and application of existing rules in a manner that increased clarity and transparency and addressed the immediate concerns of potential strategic investors. While the changes needed to the general foreign investment law are beyond the scope of this energy-focused project, the joint ministerial body could at least facilitate investment under the existing law, apply a transparent and stable interpretation to that law, and promote amendments that would improve the investment environment in the energy sector.

Third, the body could provide a "one-stop shopping" forum to facilitate investment and bring clarity to sector operations, thus maximizing a practical approach to immediate improvements before proposing and implementing legislative changes.

Fourth, we would recommend that any assistance offered to the energy sector in the Republic of Tajikistan be coordinated with any other reform efforts, to avoid inconsistency or duplication, and to develop the consensus needed to effect change. The establishment of a joint ministerial body could avoid the creation of inconsistencies or duplicated efforts, while institution building and moving toward a functioning and trained regulatory regime.

#### D. Foreign Investment Law

While broader than reform within the energy sector, amendments to this law to clarify and streamline rules and facilitate investment would have a significant impact in the energy sector, which is vital to the Tajik economy as a whole and in need of such investment, as noted above.

The recommendations provided above are intended to improve the existing legal and regulatory framework by targeting areas in which progress could provide the greatest near-term benefits, while advancing long-term goals.

REMAP is prepared and eager to assist in these efforts, at the direction of USAID.

#### APPENDIX 1 – LEGISLATION

- 2007 #235, Law on Natural Monopolies
- 2007 #37, Resolution on Tariffs
- 2006 #605, Regulation on Ministry of Energy and Industry (merging the Ministry of Energy with the Ministry of Industry)
- 2006 #589, Law on Merging the Antimonopoly Agency into the Ministry of Economic Development and Trade
- 2006 #505, Regulation on State Energy Commission of the Republic of Tajikistan<sup>7</sup>
- 2006 #313, Regulation Establishing the State Energy Commission of the Republic of Tajikistan
- 2006 #283, Regulation and Charter On the Centre for Management of Projects in Energy Sector of Tajikistan
- 2006 #198, Law on the Competition and Restriction of Monopolistic Activity on Commodity Markets
- 2005 #337, Law and Regulation on Peculiarities of Licensing of Certain Types of Activities
- 2005 #125, Resolution Establishing Commission for the Restructuring of Natural Monopolies and Especially Large Enterprises, and Approving Regulations Thereof and the Procedure
- 2005 #118, Law Amendments to the Law on Energy
- 2004 #61, Tax Code Establishing a special tax regime for construction of power stations (Ch. 49)
- 2004 #37, Law on Licensing of Certain Types of Activities
- 2004 #10, Law on State Enterprise<sup>8</sup>
- 2003 #486, Resolution on Strategic Plan for Privatization, of Medium and Large Enterprises and the Restructuring of Natural Monopolies and Especially Large Enterprises for 2003 – 2007
- 2002 #318, Regulation and Concept Document Concept On Development of Oil and Energy Sectors of Tajikistan for 2003 2015
- 2002 #55, Regulations on the Register of Natural Monopolies
- 2002 #55, Procedure for the Regulation, Determination, Setting of Prices (Tariffs) or their Upper Limits for Services, rendered by the Natural Monopolies
- 2001 #422, Regulation on Inter-ministerial Consultancy Commission on Energy
- 2000 #123, Parliament Resolution Enacting the Law on Energy
- 2000 #33, Law on Energy
- 1999 #802, Law on Civil Code, Part I (Art. 124-127 and Ch. 16)
- 1998 #158, Decree on monopolies
- 1996 #465, Resolution on State Energy Oversight in the Republic of Tajikistan

<sup>&</sup>lt;sup>7</sup> This commission is designed to provide strategic input and does not yet exist.

<sup>&</sup>lt;sup>8</sup> This indicates that Barki Tojik is to be a state enterprise or a joint stock company. Barki Tojik is a 100% state-owned joint stock company, and so, technically, does not fit this legal description.

<sup>&</sup>lt;sup>9</sup> The 2002 #55 documents listed here are annexes to a now defunct law (but the annexes remain good law). The second annex on tariffs provides a procedure in which the utility proposes a tariff to the Antimonopoly Agency (which is now within the MOEcon). The President must also approve the tariffs.

#### APPENDIX 2 – INTERVIEWS

- Local counsel: Shavkat Akhmedov and Farhad Azizov
- Barki Tojik
- Ministry of Industry and Energy
- Ministry of Economy and Development
- Aga Khan Fund Foundation for Economic Development / Aga Khan Foundation